



HL  
JULIA  
8-20-03

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Adityo Prakash, et al.

Serial No. 10/032,394

Filed: December 19, 2001

Title: ***ADAPTIVE TRANSFORMS***

Examiner: not yet known

Art Unit: 2613

Atty. Dkt. No.: 10006.00610

RECEIVED  
MAY 29 2002  
Technology Center 2600

Commissioner of Patents  
Washington, DC 20231

**INFORMATION DISCLOSURE STATEMENT**

**Under 37 C.F.R. §1.56 and §§1.97-98**

Sir:

Pursuant to the provisions of 37 CFR 1.56 and §§1.97-98, enclosed herewith is form PTO/SB/08 (substitute for form 1449A/PTO) listing references which may be material to the examination of this application, and with respect to which there may be a duty to disclose. The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is prior art or is pertinent to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

A copy of each listed reference is enclosed herewith, unless no such copy is required pursuant to 37 CFR § 1.98(d).

- ☐ This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application Serial No. [SERIAL NUMBER], filed on [FILING DATE], and the references cited therein are hereby listed but are not required to be provided in this application under 37 CFR § 1.98(d).

Pursuant to 37 CFR §1.97, this Information Disclosure Statement is being submitted under the section indicated below.

☒ 37 CFR §1.97(b).

☐ 37 CFR §1.97(c). If so, then either:

☐ Applicant certifies pursuant to 37 CFR § 1.97(e) that either:

- ☐ each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; OR
- ☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing this certification after making reasonable inquiry, was known to any individual designated under 37 CFR § 1.56 (c) more than three months prior to the filing of this Statement.

OR

☐ Applicant submits the petition fee of \$180 as set forth in 37 CFR § 1.17(p).

☐ 37 CFR § 1.97(d). If so, then both:

☐ Applicant certifies pursuant to 37 CFR § 1.97(e) that either:

- ☐ each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; OR
- ☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing this certification after making reasonable inquiry, was known to any individual designated under 37 CFR § 1.56(c) more than three months prior to the filing of this Statement.

AND

☐ Applicant submits the petition fee of \$180 as set forth in 37 CFR § 1.17(p).

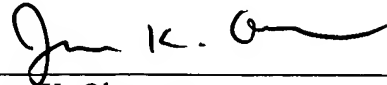
Consideration of the listed references and favorable action are respectfully solicited.

Respectfully submitted,

Adityo Prakash, et al.

Dated: May 22, 2002

By:



James K. Okamoto

Attorney For Applicant(s)

Reg. No. 40,110

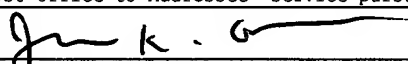
DEGUZMAN OKAMOTO & BENEDICTO LLP


P.O. Box 51900

Palo Alto, CA. 94303

Tel.: (650) 691-2030

Fax: (650) 691-2032

CERTIFICATE OF MAILING			
I hereby certify that this correspondence, including the enclosures identified herein, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date shown below. If the Express Mail Mailing Number is filled in below, then this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service pursuant to 37 CFR 1.10.			
Signature:			
Typed or Printed Name:	James K. Okamoto	Dated:	May 22, 2002
Express Mail Mailing Number (optional):			



Approved for use through 10/31/2002. OMB 0651-0031  
Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Complete if Known**

<b>Application Number</b>	10/032,394
<b>Filing Date</b>	December 19, 2001
<b>First Named Inventor</b>	Adityo Prakash
<b>Group Art Unit</b>	2613
<b>Examiner Name</b>	not yet known
<b>Attorney Docket Number</b>	10006.000610

*(use as many sheets as necessary)*

Sheet 1 of 2

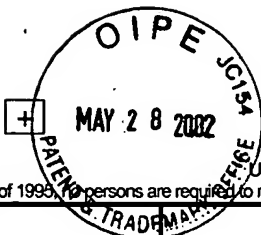
[illegible][illegible]

Date Considered

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

### Complete if Known

Application Number	10/032,394
Filing Date	December 19, 2000
First Named Inventor	Adityo Prakash
Group Art Unit	2613
Examiner Name	not yet known
Attorney Docket Number	10006.000610

### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C	PETER J. BURT, et al., The Laplacian Pyramid as a Compact Image Code; April 1983, pgs. 532-540, Vol. COM-31; IEEE Transactions on Communications.	
	D	AMIR SAID, et al., A New, Fast, and Efficient Image Codec Based on Set Partitioning in Hierarchical Trees; June 1996, pgs. 243-250, Vol. 6 No. 3; IEEE Transactions on Circuits and Systems for Video Technology.	
	E	MICHAEL W. MARCELLIN, et al., Trellis Coded Quantization of Memoryless and Gauss-Markov Sources; January 1990, pgs. 82-93, Vol. 38 No. 1; IEEE Transactions on Communications.	
	F	JEROME M. SHAPIRO, An Embedded Hierarchical Image Coder Using Zerotrees Of Wavelet Coefficients; pgs. January 1993, pgs. 214-223The David Samoff Research Center, Princeton, N.J.	
	G	THOMAS SIKORA, et al., Express Letters; June 1995, pgs. 254-258, Vol. 5 No. 3; IEEE Transactions on Circuits and Systems for Video Technology.	
	H	ANDRE KAUP, Object-Based Texture Coding of Moving Video in MPEG-4; February 1999, pgs.5-15, Vol. 9 No. 1; IEEE Transactions on Circuits and Systems for Video Technology.	
	I	JIN LI, et al., Arbitrary Shape Wavelet Transforms with Phase Alignment; January 1998, pgs. 683-687; Digital Video, Sharp Laboratories of America, Camas, WA.	
	J	RONALD R. COIFMAN, et al., Signal Processing and Compression with Wavelet Packets; 5 April 1990, pgs. 1-10; Numerical Algorithms Research Group, Yale University, Connecticut.	
	K	WIM SWELDENS, The Lifting Scheme: A Custom-Design Construction of Biorthogonal Wavelets; Nov. 1994, revised Nov. 1995, pgs. 186-200; Article No. 0015; AT&T Bell Laboratories, Murray Hill, NJ.	
	L	WIM SWELDENS, Industrial Mathematics Initiative; Research Report, pgs. 1-34; The University of South Carolina, Department of Mathematics, Carolina.	
	M	INGRID DAUBECHIES, Ten Lectures on Wavelets; Society For Industrial and Applied Mathematics, Philadelphia, Pennsylvania 1992.	
	N	MARK DE BERG, et al.; Computational Geometry, Algorithms and Applications; Department of Computer Science, Utrecht University, The Netherlands; Pohang University of Science and Technology, South Korea.	

Examiner  
Signature

Date  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

2613



Please type a plus sign (+) inside this box → ☒ PTO/SB/21 (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<h2 style="margin: 0;">TRANSMITTAL FORM</h2> <p style="margin: 0;"><i>(to be used for all correspondence after initial filing)</i></p>	Application Number	10/032,394
	Filing Date	December 19, 2001
	First Named Inventor	Adityo Prakash
	Group Art Unit	2613
	Examiner Name	not yet known
Total Number of Pages in This Submission		6 **
Attorney Docket Number		10006.000610

RECEIVED  
 MAY 28 2002  
 Technology Center 2600

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application)  <input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input checked="" type="checkbox"/> Transmittal Form <input checked="" type="checkbox"/> Information Disclosure Statement  <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <div style="margin-top: 5px;"> <b>Form PTO/SB/08;</b>  <b>Copies of Listed References:</b>  <b>(A - N documents);</b>  <b>Return receipt postcard</b> </div>
<div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> Remarks		
** does not include pages for listed references		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	James K. Okamoto, Reg. No. 40,110 DEGUZMAN OKAMOTO & BENEDICTO, LLP.
Signature	
Date	May 22, 2002

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: <span style="border: 1px solid black; padding: 2px 20px;">05/22/2002</span>			
Typed or printed name	James K. Okamoto		
Signature		Date	May 22, 2002

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be send to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.